State of California Regional Water Quality Control Board San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT

April 12, 2017

ITEM: 8

SUBJECT: Informational Workshop on the Use of Remote Monitoring

Technologies to Assist the San Diego Water Board Mission (Sarah

Mearon).

PURPOSE: To provide the Board, staff, dischargers, and the public with

information on several state-of-the-art monitoring and surveillance technologies not commonly used by Board staff or dischargers for

compliance, monitoring, and enforcement work.

RECOMMENDATION: This is an information item only. The Board will not take an action.

KEY ISSUES: 1. Modern monitoring technologies enhance the Board's ability to

efficiently prevent, reduce, treat, and avoid pollution, in keeping with our overall mission of restoring and protecting water quality

and beneficial uses within the San Diego Region.

2. These technologies can extend the Board's reach in space and

time to monitor compliance, collect water quality and other

environmental data, and perform enforcement work.

PRACTICAL VISION: This item is consistent with the mission of the Practical Vision to

ensure that monitoring and assessment programs accurately and efficiently assess the status and trends of conditions in San Diego

Region waters, identify sources of impairment, assess the effectiveness of management actions, and effectively communicate key findings to the public, stakeholders, and

decision-makers.

DISCUSSION: Traditional monitoring methods typically require a substantial

amount of staff time. Such methods necessitate expenditure of a large number of person-hours in the deployment of sampling devices and the collection of field data, with additional time spent on travel to and from field sites. Such methods limit the reach of environmental agencies, responsible parties, and dischargers, as decisions must be made regarding prioritization of monitoring

activities.

Modern monitoring methods typically have the advantage of requiring fewer human resources, with technologies such as satellite imagery and surveillance cameras requiring minimal or no field efforts. Other devices such as passive samplers and the Sea Ring represent breakthroughs in technology that allow the reliable and robust collection of data in ways and at concentrations not possible before.

These methods can be used in a variety of different applications and programs, including construction storm water permitting compliance monitoring, enforcement inspections, porewater and water column chemistry sampling, harmful algal bloom (HAB) tracking, and sewage collection system leak monitoring.

The informational workshop and trade show will serve to educate San Diego Water Board staff, as well as dischargers, responsible parties, and the public, on the applications, advantages, and limitations of the various state-of-the-art monitoring and surveillance technologies that are currently available to perform the type of work overseen by this agency.

LEGAL CONCERNS: None.

SUPPORTING DOCUMENTS:

None.

PUBLIC NOTICE: An announcement for the item was posted on the San Diego

Water Board's website and sent to subscribers to the email list for Board meetings on March 14, 2017. The agenda notice for today's meeting was posted on the San Diego Water Board's website and

sent to subscribers to the email list for Board meetings.